

# BF31 NBR

black | density 1.30 | hardness 70

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## NITRILE SHEETING: FOR TRANSFORMER OIL



### FEATURES

High grade NBR.

### ADVANTAGES

- ▶ Excellent mechanical properties, compression set in particular
- ▶ Excellent temperature resistance
- ▶ Excellent low temperature resistance
- ▶ Excellent ageing resistance
- ▶ Excellent hydrocarbons resistance
- ▶ Matte finish to guarantee a good surface finished quality, to secure an easy unrolling, and to facilitate adhesive bonding processes

### BENEFITS

- ▶ Reliability
- ▶ Safety

### APPLICATIONS

Cutting gaskets for sealing between the tank and the lid of immersed electrical transformers in contact with synthetic dielectric and mineral oils.

No resistance to pyralene.

[www.trelleborg.com/elastomerlaminates](http://www.trelleborg.com/elastomerlaminates)

## MECHANICAL, PHYSICAL AND CHEMICAL PROPERTIES

Measured characteristics	Standard	Value
<b>MECHANICAL</b>		
Rubber compound		NBR
Density		1.30 ± 0.05 g/cm <sup>3</sup>
Hardness	ASTM D2240	70 ± 5 Shore A
Tensile strength	ISO 37	≥ 13 MPa
Elongation at break	ISO 37	≥ 300 %
Tear resistance, crescent specimen	ISO 34-1	≥ 20 N/mm
Compression set after 70 h at 100 °C	ISO 815-1	≤ 40 %
<b>TEMPERATURE</b>		
Working temperature		- 40/+ 130 °C
<b>AGEING</b>		
Δ Tensile strenght after 168 h at 70 °C	ASTM D573	≤ - 20 %
Δ Elongation at break after 168 h at 70 °C	ASTM D573	≤ - 30 %
Oil IRM 903, Δ Tensile strenght after 72 h at 100 °C	ASTM D573	≤ - 20 %
Oil IRM 903, Δ Elongation at break after 72 h at 100 °C	ASTM D573	≤ - 40 %
<b>OIL RESISTANCE</b>		
Oil IRM 901, Δ volume after 70 h at 100 °C	ASTM D471	- 20/5 %
Oil IRM 903, Δ volume after 70 h at 100 °C	ASTM D471	± 5 %
<b>CHEMICAL RESISTANCE</b>		
Diluted acids and bases	Concentrated acids and bases	Ozone
Very good	Good	Medium
		Oils and hydrocarbons
		Very good

## DIMENSIONS

Thickness (mm)		Width (mm)		Length (m)		Weight (kg/m <sup>2</sup> )	Pattern
2	± 0.3	1400	± 2 %	15	± 2 %	2.60	2 sides matt
3	± 0.3	1400	± 2 %	10	± 2 %	3.90	2 sides matt
4	± 0.4	1400	± 2 %	10	± 2 %	5.20	2 sides matt
5	± 0.4	1400	± 2 %	10	± 2 %	6.50	1 side smooth/1 side matt
6	± 0.5	1400	± 2 %	10	± 2 %	7.80	1 side smooth/1 side matt

## IDENTIFICATION

Branding	Without.
Packaging	Thickness ≤ 6 mm rolled on cardboard tube Ø 80 mm. Thickness > 6 mm in roll.
Wrapping	Black polyethylene film.
Labelling	Self-adhesive label indicating product name, dimensions, area in m <sup>2</sup> , nominal weight, and product code to allow product traceability.